[FIG.1]

TRANSMIT DATA

101   CODING SECTION

102   MODULATION SECTION

5   103   SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

10   108   DEMODULATION SECTION

109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.2]

15   TRANSMIT DATA

201   INTERLEAVER

202   CONVOLUTIONAL CODING SECTION

203   CONVOLUTIONAL CODING SECTION

TO MODULATION SECTION 102

20

[FIG.3]

ADJACENT CHANNEL INTERFERENCE WAVES

ADJACENT CHANNEL INTERFERENCE WAVES

FREQUENCY

25

[FIG.4]

TRANSMIT DATA

101   CODING SECTION

102   MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

401   SPREADING SECTION

5   SPREADING CODE

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

10   109   TRANSMISSION POWER CONTROL SECTION

402   DESPREADING SECTION

RECEIVE DATA

[FIG.5]

15   FREQUENCY

#5m   m'th chip of signals k+1 through k of time T

      m'th chip of signals k+1 through 2k of time 2T

#4m+1 1st chip of signals k+1 through 2k of time T

20   1st chip of signals k+1 through 2k of time 2T

#4m   m'th chip of signals 3k+1 through 4k of time T

      m'th chip of signals 3k+1 through 4k of time 2T

#3m+1 1st chip of signals 3k+1 through 4k of time T

25   1st chip of signals 3k+1 through 4k of time 2T

#3m   m'th chip of signals 2k+1 through 3k of time T

      m'th chip of signals 2k+1 through 3k of time 2T

#2m+1 1st chip of signals 2k+1 through 3k of time T

1st chip of signals 2k+1 through 3k of time 2T

#2m   m'th chip of signals 4k+1 through n of time T

m'th chip of signals 4k+1 through n of time 2T

5

#m+1 1st chip of signals 4k+1 through n of time T

1st chip of signals 4k+1 through n of time 2T

#m   m'th chip of signals 1 through k of time T

m'th chip of signals 1 through k of time 2T

10

#1   1st chip of signals 1 through k of time T

1st chip of signals 1 through k of time 2T

TIME

15   [FIG.6]

ADJACENT CHANNEL INTERFERENCE WAVES

ADJACENT CHANNEL INTERFERENCE WAVES

FREQUENCY

20   [FIG.7]

TRANSMIT DATA

101   CODING SECTION

701a MODULATION SECTION

701b MODULATION SECTION

25   RSSI SIGNAL

702   CONTROL SECTION

103   SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

5   109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.8]

RSSI SIGNAL

10   801   FIRST DETERMINATION CONTROL SECTION

TO MODULATION SECTION 701a

802   SECOND DETERMINATION CONTROL SECTION

TO MODULATION SECTION 701b

15   [FIG.9]

RSSI SIGNAL

901   CONTROL SECTION

TRANSMIT DATA

101   CODING SECTION

20   ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

902   CONTROL SECTION

701a MODULATION SECTION

701b MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

25   ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

5   [FIG.10]

TRANSMIT DATA

1001 S/P CONVERSION SECTION

USER INFORMATION

103   SUBCARRIER ALLOCATION SECTION

10 ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

15 109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.11]

TRANSMIT DATA

20 101   CODING SECTION

1101 INTERLEAVING SECTION

1102 INTERLEAVING SECTION

102   MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

25 ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

5   [FIG.12]

ADJACENT CHANNEL INTERFERENCE WAVES

ADJACENT CHANNEL INTERFERENCE WAVES

FREQUENCY

10   [FIG.13]

TRANSMIT DATA

101   CODING SECTION

102   MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

15   ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

INFORMATION

NULL SIGNAL

1301   SELECTION SECTION

20   RSSI SIGNAL

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

25   109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.14]

MAIN LOBE

FREQUENCY

[FIG.15]

FREQUENCY

[FIG.16]

NULL SIGNAL TRANSMITTED

FREQUENCY

[FIG.17]

TRANSMIT DATA

101   CODING SECTION

102   MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

INFORMATION

NULL SIGNAL

1701   SELECTION SECTION

DELAY DISTRIBUTION INFORMATION

104   OFDM SECTION

105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.18]

RECEIVE DATA

1801 DELAY CIRCUIT

1802 SUBTRACTION CIRCUIT

1803 ABSOLUTE VALUE GENERATION CIRCUIT

1804 AVERAGING CIRCUIT

DELAY DISTRIBUTION INFORMATION

[FIG.19]

TRANSMIT DATA

101 CODING SECTION

102 MODULATION SECTION

103 SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

INFORMATION

NULL SIGNAL

1901 SELECTION SECTION

RECEPTION LEVEL INFORMATION

104 OFDM SECTION

105 AMPLIFIER

107 FFT SECTION

108 DEMODULATION SECTION

109 TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

[FIG.20]

TRANSMIT DATA

101   CODING SECTION

102   MODULATION SECTION

103   SUBCARRIER ALLOCATION SECTION

ADJACENT CHANNEL INTERFERENCE WAVE RECEPTION LEVEL

5   INFORMATION

NULL SIGNAL

2001 SELECTION SECTION

104   OFDM SECTION

10   105   AMPLIFIER

107   FFT SECTION

108   DEMODULATION SECTION

109   TRANSMISSION POWER CONTROL SECTION

RECEIVE DATA

15

[FIG.21]

NULL SIGNAL TRANSMITTED

NULL SIGNAL TRANSMITTED

FREQUENCY

20